



## PATIENT

Bella Huben

## SPECIES

Canine

## BREED

Dachshund

## SEX

Spayed Female

## AGE

14 Years

## WEIGHT

12.6 lbs

## INTERPRETED BY

Beth Johnson, DVM  
DACVIM

## IMAGING PERFORMED BY

Dr. Wasserman

## HOSPITAL NAME

Highlands Animal  
Hospital

## REFERRING VET

Dr. Frankenberger

## INVOICE

75057

## DATE

5/12/26

## PRESENTING CLINICAL SIGNS

Purpose of sonogram, evaluate abdomen prior to dental. Moderate abdominal tension on sonogram. Unknown if on prevention. Last recorded prevention trifixis sent home with client late 2025. Fecal DxAg panel pending. Free catch urine pending. History of calcium oxalates. BW/chemistry pending. 5/21/25 last abnormal was ALP 890. Current medications novox, trazodone, and clindamycin for dental/COHAT prophylactic antibiotics to start today. Radiographs submitted for supplemental review of bladder.

Abnormal PE/Chem/CBC/UA Results: Recent labs pending/sent out today.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The urinary bladder is not fully distended (almost empty). Visible contents are anechoic, and I suspect at least two cystoliths measuring approximately 0.50 cm in size. The urinary bladder wall is difficult to fully assess for pathology without further distention. No visible masses are observed. The trigone appears largely normal in thickness with a smooth mucosal surface, but the urethra is difficult to fully visualize in these images.

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia or infarcts observed. Left kidney measured 4.02 cm. Right kidney measured 4.19 cm. Punctate non-obstructive nephroliths were noted bilaterally.

### Adrenal Glands

The right adrenal gland is normal in size (1.1 cm at cranial pole and 0.67 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.54 cm at cranial pole and 0.61 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

### Spleen

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver), except for an approximately 0.70 cm in diameter hypo- to anechoic non-capsule disrupting density near the caudal aspect of the spleen. Splenic vasculature appears normal.

### Liver

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is mildly heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.



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## Gastrointestinal

The visible stomach wall is normal in thickness and layering. The stomach is moderately distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. If patient was appropriately fasted, delayed gastric emptying could be considered. Non-shadowing foreign material is considered less likely but cannot be definitively ruled out.

If clinical signs are consistent (vomiting, etc.), recommendations include supportive medical care, 24 hours fasting and re-image.

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

## Pancreas

The pancreas that is observed appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

## Free Abdomen

There is no visible free peritoneal effusion noted in these images.

There is no apparent pathologic lymphadenopathy noted in these images.

The visible heart base (RA) and pericardium are unremarkable without obvious pathology noted in these images at this time. If cardiac function evaluation is desired, a full echocardiogram is recommended.

## PRIMARY FINDINGS

- Mildly heterogenous liver – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.
- Moderate gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

## SECONDARY FINDINGS

- Hypo to anechoic splenic nodule – likely represents a benign lesion such as a cyst, hematoma, nodular hyperplasia, extramedullary hematopoiesis, etc., however while considered less likely, infiltrative neoplasia can mimic benign lesions, and cannot be ruled out.



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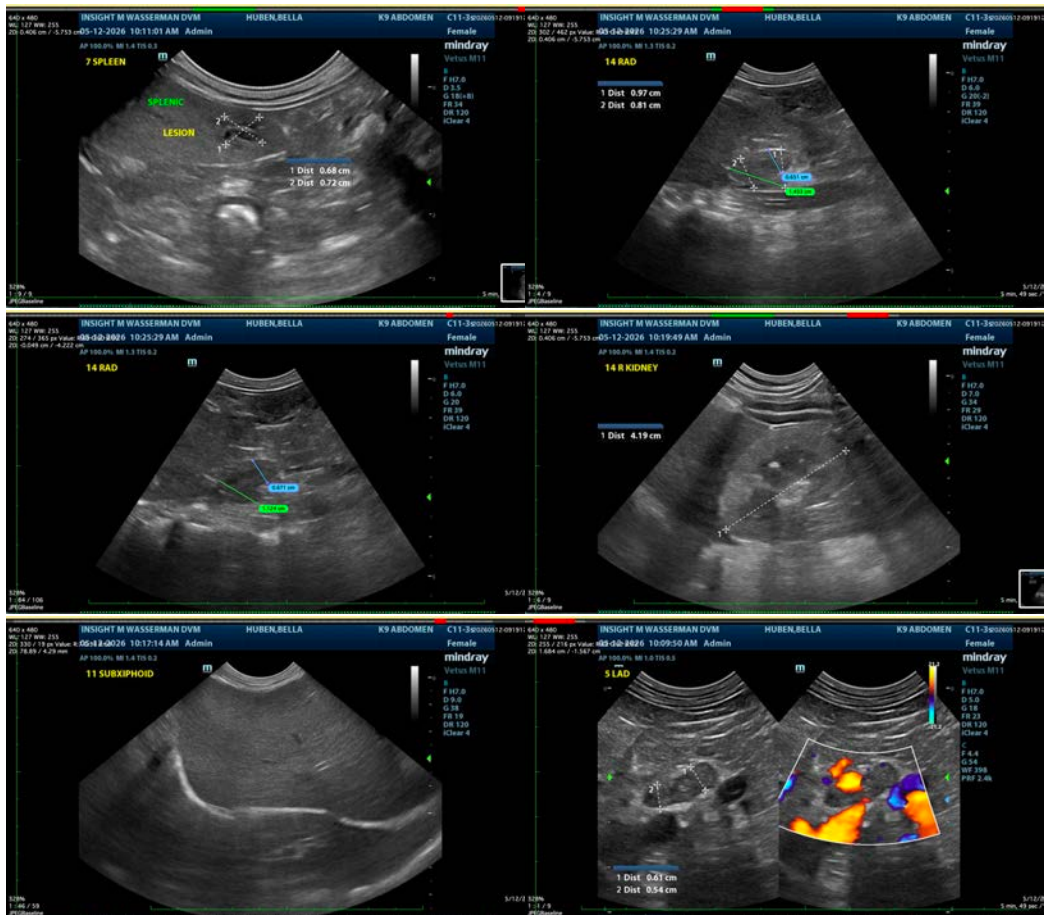
5/12/26

- Moderate age related kidney changes with punctate non-obstructive nephroliths bilaterally.
- Suspect at least two cystoliths (possibly small enough to pass in a female dog, but at the upper end of size limit for that).

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

As is reportedly pending, a full general metabolic health screen is recommended to include a CBC/Chem panel, electrolytes, a urinalysis and, if indicated based on urinalysis results, urine culture is recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ratio is recommended.

Further recommendations are largely dependent on the results of that evaluation, patient's clinical signs, etc.





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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

**Beth Johnson, DVM, DACVIM**  
info@sonopath.com